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Alcidamea Producta Cress. and its Parasites

Anstruther Davidson

Described from thirteen female and five male specimens taken at Moscow, Idaho, in May, by Prof. Aldrich.

This species is quite distinct from the described species of *Tropidia*, which are included below in the dark antennæ and legs and the absence of the coxal spurs. The pile of the thorax and scutellum indistinctly longer than in *T. incana* Twnds. according to Mr. Snow, who has kindly compared them for me.

1. *nigricornis* n. sp.
2. *mamillata* Loew, Centur. i, 68, 1861.
3. *calcarata* Will., Synopsis, 208, 1886.
4. *quadrata* Say, Amer. Ent. i, viii, 1824; ibid. Comp. Wrts. Lec. i, 14.
5. *incana* Townsend, Trans. Am. Ent. Soc. 1895, 52.
6. *albistylum* Macquart, Dipt. Exot. 2e, Suppl. 60, i, tab. 2, fig. 10, Will. Syn. 207; ibid. Ent. News, 1892, 146.

Melanostoma rufipes Will.

The generic position of this species has been doubtful owing to the fact that only the female has been described, and that the only character separating *Melanostoma* from *Platychirus* lies in the anterior tarsi of the male. Dr. Williston says, "Until the male of this species is known its position is somewhat doubtful. Its relationship to *Chilosia* is very strong, but the distinctly banded abdomen would seem to remove it from that genus; possibly it is a *Platychirus*."

I have had the opportunity of examining specimens from the collection of Prof. Aldrich that remove all doubt on this point. The anterior tarsi of the male are not at all dilated, hence Dr. Williston's provisional location of this species in *Melanostoma* is the correct disposition of it. It cannot be a *Chilosia* as there are no traces of the lateral facial sutures that characterize that genus.

These specimens show several differences from the description in color; in fact none of them agrees exactly, but I am unable to discover any substantial structural differences, and hence conclude that this species like the others of the genus is very variable.

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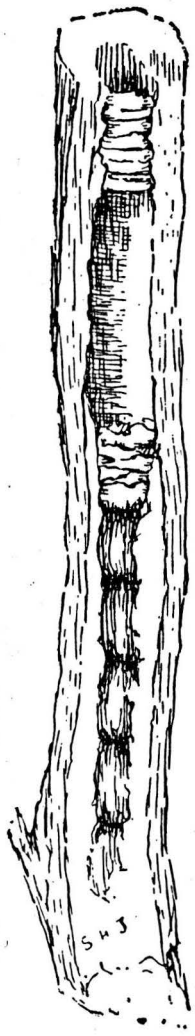
ALCIDAMEA PRODUCTA Cress. AND ITS PARASITES.

By A. Davidson, M.D., Los Angeles, Cal.

This is one of the more common bees of this district, and may be found over a wide range of territory, nesting freely wherever convenient sites are to be found from the plains around Los Angeles to at least 5000 feet altitude in the Tehachapi Mountains.

It prefers as a nesting site the broken twigs of the elder tree or fennel plant, burrowing from the end in the medium sized branches. The burrow when completed seldom extends more than six or seven inches into the branch, and is usually four lines wide. In the typical nest the cells as shown in the illustration are crowded together at the bottom, while on the top of and usually contiguous to the outermost cell are alternating layers of pith and clay, the former evidently gathered from the sides of the burrow above, as that part is wider than the section occupied by the cells. Near the entrance to the burrow the opening is further obstructed by a series of clay partitions with the intervals between filled with pith as in the other. The partitions are somewhat peculiarly constructed, both the upper and lower being fashioned on the same plan. The lower usually has a layer of pith next the cell of a thickness varying from one-half to one-eighth of an inch, on top of which is a disc of clay one-half line thick, then one-eighth of an inch of pith and another disc, etc. The outer defence is wholly constructed of alternating layers of clay discs and pith differing only from the deeper one in being begun and finished with a clay disc. The cells measuring 6 by 3 lines are closely packed together at the bottom of the burrow, only a thin clay disc such as is used in the partitions, one line in thickness intervening between each.



In the specimens kept under observation the bees hatched out at various dates from March 15 to April 12.

The parasites affecting them were four in number, the most common being *Cryptus albitarsis* Cress. which affected 25 per cent. The cocoons of *Cryptus* are in shape exactly similar to

those of their host, but possess a thinner, almost diaphanous wall.

Sapyga aculeata Cress. affected 7½ per cent.

Photopsis? affected 5 per cent.

Stelis sexmaculata Ashm. affected 5 per cent. The cocoons of this species are all somewhat alike in texture, are 4 lines long, of an oblong shape, with rounded ends and of a gray opaque color. Appended is Mr. Ashmead's description of this new species.

Microstelis **STELIS** Panzer.

Stelis 6-maculata Ashm. n. sp. ♀.—Length 5 mm. Black, clothed with a griseous pubescence, denser on pleura and face; the first, second and third abdominal segments each with two oblong white spots. Wings subfuliginous, the second recurrent nervure almost interstitial with the second transverse cubital nervure. Head opaque, closely punctate; thorax and abdomen also punctate, but shining.

Comes nearest to *S. fœderalis* Smith, which, however, has only two white spots on the abdomen.

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NOTES ON THE WHITE CALLIMORPHAS.

By Harrison G. Dyar.

Mr. O. D. Foulks has sent me some of the *Callimorpha* mentioned as *C. vestalis* on page 298 of the November number of the News. They prove to be *fulvicosta*, and the specimens grade into *reversa* and not *lecontei*. The series now before me suggests a change in the synonymy given by Mr. Neumoegen and myself (Jour. N. Y. Ent. Soc. i, 159–161). At that time we did not recognize *vestalis*, but wrongly identified the form as *fulvicosta*, and consequently renamed the true *fulvicosta* as var. *duplicata*. Mr. Foulks' specimens are *H. reversa*, var. *duplicata*, N. and D., but the recognition of *vestalis* will correct the synonymy as below. I differ from Mr. Lyman and Prof. Smith (see Check List, 1891) in not considering three white forms, *consita*, *fulvicosta* and *vestalis* as of specific rank. That they are varieties is proven in the case of *fulvicosta* by Mr. Foulks' specimens, and is indicated in the case of *vestalis* by examples from Mr. J. S. Faaborg, of Clinton, Iowa.

The larvæ of only two species of *Haploa* are known with any certainty, and it is to be hoped that special efforts will be made to discover the rest.

1. **Haploa clymene** Brown.
   interrupto-marginata de Beauvois.
   comma Walker.

Larva bright yellow with white lateral stripe, mottled along its upper edge with bright red; the anal end faced with red markings (Siewers).

These observations are so far without corroboration. If correct, the larva is very distinct.

2. **H. colona** Hübner.
   carolina Harris.
   clymene Esper.
   var. **conscita** Walker.
   lactata Smith.

Dr. Riley found the larva on oak, but we have no other evidence about it.

3. **H. reversa** Stretch.*
   suffusa Smith.
   var. **fulvicosta** Clemens.
   duplicata Neumoegen and Dyar.

Larva black, a bright yellow dorsal and stigmatal stripe, the latter centered with a broken black band (Saunders, Riley).

The two published descriptions correspond. The stigmatal band is apparently broken by black in the manner of the European *dominula*.

4. **H. confusa** Lyman.

Larva black, yellow dorsal, stigmatal and subventral lines, the latter broken into dots and partly obsolete (Lintner, Lyman, Dyar).

My observations agree with those of Mr. Lyman. Dr. Lintner's description is too brief for certain recognition.

5. **H. lecontei** Guerin.
   var. **confinis** Walker.
   var. **militaris** Harris.
   var. **vestalis** Packard.

Larva black, with rich yellow dorsal and lateral lines (Strecker).

Prof. Smith refers the moths bred from these larvæ to *militaris*. The statements about their hybrid origin seem confusing, and there is a possibility of misidentification. We must await further

* By rule of priority this must be known as *fulvicosta* with *reversa* as variety. The species differs from *colona* only in the secondaries being white instead of yellow, and these forms may not be specifically distinct.